CLAIMS

1/ Paper based on a fiber composition, the paper comprising at least one multitone-effect watermark, wherein the watermark, when observed in transmitted light, has a set of pale zones arranged in the manner of a screened image.

2/ Paper according to claim 1, wherein the pale zones present a weight per unit area that is less than that of the remainder of the paper.

3/ Paper according to claim 1, wherein the watermark appears as a screened image whose screen marks are for the most part constituted by lines.

4/ Paper according to claim 1, wherein the pale zones all have the same weight per unit area of fiber composition.

5/ Paper according to claim 1, the paper being colored, fluorescent, iridescent, or presenting any other shading or optical effect.

6/ A wire used in the wet stage of papermaking, the wire being provided with a set of masks representing a pattern to be made as a multitone-effect watermark on the paper, the set of masks being denser in regions corresponding to the pale portions of the looked-for watermark and less dense in the regions corresponding to the other portions of the looked-for watermark.

7/ A wire according to claim 6, wherein the masks are disposed on the side of the wire that comes into contact with the aqueous suspension containing the fibers of the paper.

8/ A method of making a screened image for forming a watermark, the method comprising the following steps:

· making a screened image from a scanned image by using a known screening method;

· making a perforated element from said screened image and suitable for use during the aqueous stage of paper formation, said perforated element having solid regions disposed like the pale portions of the watermark; and

· making a watermark by means of said perforated element by placing the perforated element so that it limits accumulations of fibers in register with the solid regions of the perforated element during the aqueous stage of paper formation.

9/ A method according to claim 8, wherein the screened image is an image having screen marks constituted by lines.

10/ A method according to claim ~~9~~, wherein the screened image is retouched prior to making the perforated element so as to ensure that no isolated pale zone exists in the watermark.

11/ A method according to claim 10, wherein the perforated element is made in the form of a one-piece plate having perforations and in which the solid portions are disposed like the pale zones of the watermark.

12/ A set of masks constituting a perforated element according to claim 8.

13/ A set of masks according to claim 12, wherein the masks are shaped individually in the form of a special unit pattern for personalizing the sheet of paper by creating pale zones in the thickness thereof that reproduce the individual pattern of the masks.

14/ A set of masks according to claim 13, wherein each unit pattern is in the form of a letter or a set of letters.

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